



PATENT  
Attorney Docket No. HYB-005US6

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Kandimalla et al.

Examiner: Not Yet Assigned

Serial No.: 10/694,075

Group Art Unit: 1632

Filed: October 27, 2003

For: MODULATION OF IMMUNOSTIMULATORY ACTIVITY OF  
IMMUNOSTIMULATORY OLIGONUCLEOTIDE ANALOGS BY  
POSITIONAL CHEMICAL CHANGES

Commissioner for Patents  
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8/25/04

Signature

Laura Labier

Printed Name:

Laura Labier

\*\*\*\*\*

**REQUEST FOR CORRECTION OF FILING RECEIPT**

Attached is a copy of the Official Filing Receipt, the Utility Patent Application Transmittal (Transmittal) and the Related Applications Paragraph for the above-identified patent application. As indicated in the Transmittal and Related Applications Paragraph, the Filing Receipt incorrectly identifies the Domestic Priority data as claimed by Applicants. The correct information is as follows:

Domestic Priority data as claimed by applicant:

This application is a divisional of U.S. Patent Application No. 09/965,116 filed on September 26, 2001, which is a CIP of U.S. Patent Application No. 09/712,898 filed on

Kandimalla et al.  
Application No. 10/694,075  
Filed October 27, 2003

November 15, 2000 (abandoned) which claims benefit of U.S. Provisional Patent Application Nos. 60/235,452 and 60/235,453 both filed on September 26, 2000.

The attached copy of the Official Filing Receipt shows the changes marked in red ink for your convenience.

It is Applicants' belief that no fee is due for correction of this error. If, however, a fee is required, please charge the appropriate fee to Deposit Account No. 50-2285.

Respectfully submitted,

Dated: August 25 2004

By: Joseph C. Zuccherro

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/694,075	10/27/2003	1632	385	HYB-005US6 (1006/006)	28	3	3

CONFIRMATION NO. 3779

WAYNE A. KEOWN  
 SUITE 1200  
 500 WEST CUMMINGS PARK  
 WOBURN, MA 01801

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 BY: *mb*

## FILING RECEIPT



\*OC000000013371156\*

Date Mailed: 07/29/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Ekambar R. Kandimalla, Southboro, MA;  
 Qiuyan Zhao, Southboro, MA;  
 Dong Yu, Westboro, MA;  
 Sudhir Agrawal, Shrewsbury, MA;

## Domestic Priority data as claimed by applicant

Which this application is a CIP of 09/712,898 11/15/2000 ABN

which claims benefit of 60/201,578-05/01/2000

*This application is a divisional of 09/965,116 09/26/2001*

*60/235,452 09/26/2000*

*and 60/235,453 09/26/2000*

## Foreign Applications

If Required, Foreign Filing License Granted: 02/05/2004

Projected Publication Date: To Be Determined - pending completion of Sequence Disclosures

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

Title

"Express Mail" mailing label number EL892945641US  
Date of Deposit 10/27/03

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PTO/SB/05 (08-03)  
Approved for use through 07/31/2008. OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Patents, P.O. Box 1450, Alexandria, VA 22313-1450

## UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	HYB-005US8
First Inventor	Kandimalla
Title	Modulation of Immunostimulatory...
Express Mail Label No.	EL892945641US

### APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

### ADDRESS TO:

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 41]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the invention
  - Brief Summary of the invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 28]
5. Oath or Declaration [Total Sheets       ]
  - a. ☐ Newly executed (original or copy)
  - b. ☒ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

### ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement of Power of Attorney (when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 09/985,118.....

Prior application information:

Examiner Janet L. Epps Ford

Art Unit: 1632

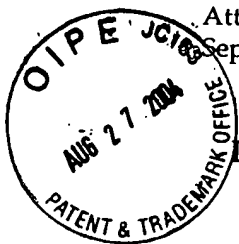
For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

### 19. CORRESPONDENCE ADDRESS

☒ Customer Number: 32254 OR ☐ Correspondence address below

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	Suite 1200				
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Country	USA	Telephone	781-938-1805	Fax	781-938-4777
Name (Print/Type)	Wayne A. Keown, Ph.D.		Registration No. (Attorney/Agent)	33,923	
Signature	<u>W. A. Keown</u>		Date	<u>10/27/03</u>	

This collection of information is required by 37 CFR 1.63(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.  
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COPY

MODULATION OF IMMUNOSTIMULATORY ACTIVITY OF  
IMMUNOSTIMULATORY OLIGONUCLEOTIDE ANALOGS BY POSITIONAL  
CHEMICAL CHANGES

(Attorney Docket No. 47508.577)

5

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. patent application serial no. 09/712,898, filed on November 15, 2000. This application also claims priority from U.S. provisional patent application serial nos. 60/235,452 and 60/235,453, both filed on  
10 September 26, 2000. Each of the patent applications listed above is hereby incorporated by reference in its entirety.

BACKGROUND OF THE INVENTION

Field of the invention

The invention relates to the therapeutic use of oligonucleotides or  
15 oligonucleotide analogs as immunostimulatory agents in immunotherapy applications.

Summary of the related art

Oligonucleotides have become indispensable tools in modern molecular biology, being used in a wide variety of techniques, ranging from diagnostic probing methods to  
20 PCR to antisense inhibition of gene expression and immunotherapy applications. This widespread use of oligonucleotides has led to an increasing demand for rapid, inexpensive and efficient methods for synthesizing oligonucleotides.

The synthesis of oligonucleotides for antisense and diagnostic applications can now be routinely accomplished. See e.g., *Methods in Molecular Biology, Vol 20: Protocols*  
25 *for Oligonucleotides and Analogs* pp. 165-189 (S. Agrawal, Ed., Humana Press, 1993); *Oligonucleotides and Analogues: A Practical Approach*, pp. 87-108 (F. Eckstein, Ed., 1991); and Uhlmann and Peyman, *supra*. Agrawal and Iyer, *Curr. Op. in Biotech.* 6: 12 (1995); and *Antisense Research and Applications* (Crooke and Lebleu, Eds., CRC Press, Boca



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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

6

Application Number	10/694,075
Filing Date	October 27, 2003
First Named Inventor	Kandimalla et al.
Art Unit	1632
Examiner Name	
Attorney Docket Number	HYB-005US6

### ENCLOSURES (Check all that apply)

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br><input type="checkbox"/> Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Technology Center (TC)<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
|---|--|---|
- Remarks
1. Post Card
  2. Request for Correction of Filing Receipt
  3. Original Filing Receipt (marked-up)
  4. Copy of Utility Patent Application Trans.
  5. Copy of Related Applications Paragraph

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Joseph C. Zuccherro, Reg. No. 55,762
Signature	<i>Joseph C. Zuccherro</i>
Date	<i>August 25, 2004</i>

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Typed or printed name	<i>Laura Labier</i>
Signature	<i>Laura Labier</i>

Date	<i>8/25/04</i>
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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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